

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system for variable input and output coupling of a plurality of optical channels, comprising:

a first side having N input channels ~~for incorporation into~~ coming out from the optical WDM data transmission link, where N is greater than 1;

a second side having N output channels for incorporation into the optical WDM data transmission link;

a third side having a plurality of channels coupled to the optical WDM data transmission link, the coupling being at least one of an input coupling of M channels and an output coupling of M channels, where M is greater than 1;

an input  $N \times M$  matrix for the N input channels provided on the first side;

an output  $M \times N$  matrix for the N output channels provided on the second side; and

a variably switchable network, wherein the first and second sides are connected to each other and to the input and output channels of the third side via the variably switchable network.

Claim 2 (currently amended): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system as claimed in claim 1, further comprising:

an additional output  $M \times N$  matrix for an additional N output channels provided on the first side; and

an additional input  $N \times M$  matrix for an additional N input channels provided on the second side.

Claim 3 (currently amended): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system as claimed in ~~claim 1~~ claim 2, further comprising:

a distributor as part of the variably switchable network, the distributor including a distributor input and at least two distributor outputs, the distributor input leading to an output and at least two distributor outputs on at least one input channel downstream of at least one of the input NxM matrix of the first side and the additional input NxM matrix of the second side, at least one of the distributor outputs leading to at least one of the output coupling of channels on the third side, and another of the distributor outputs leading to an input of at least one of the output MxN matrix on the second side and the additional output MxN matrix on the first side to an output channel on a respectively opposite side, and at another of the distributor outputs leading to an output on the third side.

Claim 4 (currently amended): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system as claimed in ~~claim 1~~ claim 2, further comprising:

a controllable switch as part of the variably switchable network, the controllable switch including at least two switch inputs and a switch output and at least one output channel upstream of at least one of the output MxN matrix of the first side and the additional output MxN matrix of the second side, at least one of the switch inputs leading to an input channel on a respectively opposite side, and at least one of the switch inputs leading to at least one of the input coupling of channels ~~an input channel~~ on the third side.

Claim 5 (currently amended): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system as claimed in ~~claim 1~~ claim 2, further comprising:

a distributor as part of the variably switchable network, the distributor including a distributor input and at least two distributor outputs, the distributor input leading to at least one of the input coupling of channels on the third side and on at least one input channel, and at least one of the distributor outputs leading to an input channel of at least one of the output MxN matrix on the second side and the additional output MxN matrix on the first side ~~output channel on one of the first and second sides.~~

Claim 6 (currently amended): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system as claimed in ~~claim 1~~ claim 2, further comprising:

a switch as part of the variably switchable network, the switch including a switch output and at least two switch inputs, the switch output leading to at least one of the input coupling of channels on the third side and on at least one output channel, and at least one of the switch inputs leading to an output channel of at least one of the input NxM matrix on the first side and the additional input NxM matrix on the second side ~~input channel on one of the first and second sides.~~

Claim 7 (currently amended): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system as claimed in claim 1, wherein at least one of the input NxM matrix and the output MxN matrix is provided as a ~~switches~~ switch with a square structure.

Claim 8 (original): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system as claimed in claim 1, further comprising:

N output switches and N input distributors on the third side.

Claim 9 (original): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system as claimed in claim 1, wherein the variably switchable network includes a single-redundancy ring backup circuit.

Claim 10 (original): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system as claimed in claim 1, wherein the variably switchable network includes a two-fiber ring backup circuit with distributed redundancy.

Claim 11 (original): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system as claimed in claim 1, wherein the variably switchable network includes a four-fiber ring backup circuit with distributed redundancy.

Claim 12 (currently amended): An optical switching matrix as an intermediate element in an optical data transmission link of a WDM ring transmission system as claimed in claim 1, wherein functions of the variably switchable network with switches and distributors are combined in at least one ~~ADP~~ variably switchable network module, for each channel, in an overall ~~ADP~~ variably switchable network module having a total of N ~~ADP~~ variably switchable network modules.